PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty) (PCT Article 36 and Rule 70) *'*05.11. 9

			 				
Applicant's or agent's file reference R-90	FOR FURTHER AC	See Form PCT/II					
		lay/month/year) 2004	Priority date (day/month/year) 22.12.2003				
International Patent Classification (IPC) or national classification and IPC Int.Cl. 7 F28F3/00 (2006. 01), F28F3/08 (2006. 01)							
Applicant SHOWA DENKO K.K.							
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. This REPORT consists of a total of3 sheets, including this cover sheet. This report is also accompanied by ANNEXES, comprising: a total of sheets, as follows: sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the 							
Supplemental Box. b. a total of (indicate type and number of electronic carrier(s)) containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4. This report contains indications re	elating to the following it	ems:					
☑ Box No. I Basis of the	report						
Box No. II Priority	Box No. II Priority						
Box No. III Non-establi	shment of opinion with r	egard to novelty, inver	tive step and industrial ap	plicability			
Box No. IV Lack of unit	ty of invention						
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
🗀 Box No. VI Certain doct							
Box No. VII Certain defe	Box No. VII Certain defects in the international application						
Box No. VIII Certain obse	Box No. VIII Certain observations on the international application						
Date of submission of the demand	Date of completion of this report						
16.06.2005	27.10.2005						
Name and mailing address of the IPEA/JP Authorized officer 3M 9 0 3 7							
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10/580408
IAP9 Rec'd PCT/PTO 24 MAY 2006
International application No.
PCT/JP2004/019706

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Box No.	. I	Basis of the report				
1. W	the in	gard to the language, this report is based on: international application in the language in which it was filed anslation of the international application into	which is the language of a			
fur	nished	ard to the elements of the international application, this report is based on (replacend to the receiving Office in response to an invitation under Article 14 are referred to in the not annexed to this report):				
区	the i	international application as originally filed/furnished				
	the d page page page	es* received by this Authority on	as originally filed/furnished			
	the c Nos. Nos. Nos.	.* as amended (together with any .* received by this Authority on	as originally filed/furnished y statement) under Article 19			
		drawings:				
	ets/figs ets/figs		as originally filed/furnished			
	ets/figs					
	_		·			
3.		amendments have resulted in the cancellation of: the description, pages the claims, Nos. the drawings, sheets/figs				
		the sequence listing (specify)				
•		any table(s) related to sequence listing (specify):				
4. 🗖						
		the description, pages				
		the claims, Nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any table(s) related to sequence listing (specify):				
* If item	* If item 4 applies, some or all of those sheets may be marked "superseded."					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/JP2004/019706

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

1.	Statement			
	Novelty (N)	Claims Claims	1-13	YES NO
	Inventive step (IS)	Claims Claims	1-13	YES NO
	Industrial applicability (IA)	Claims Claims	1-13	YES NO

2. Citations and explanations(Rule 70.7)

The following documents have been considered for the purpose of this report:

D1=JP 9-89477 A (SHOWA ALUMINUM K.K.)1997.04.04, Fig.3 (Family: none)
D2=JP 10-122771 A (SHOWA ALUMINUM K.K.)1998.05.15, Fig.5 (Family: none)
D3=JP 55-24673 U (FUJI JUKOGYO K.K.)1980.02.18, Fig.2 (Family: none)

D4=JP 3056276 U (TOYO RADIATOR K.K.)1998.11.18, Fig.1 (Family: none)

The subject matter of claim 1-13, particularly, "the spacer, which has bores extending therethrough in the front-rear direction, disposed at a position corresponding to the cutoff portion of the partition wall in the hollow body", is neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.